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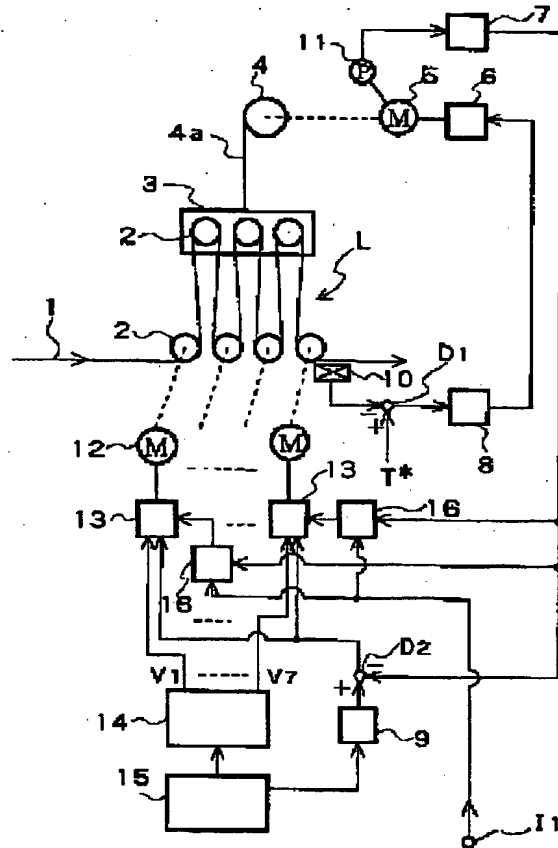
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TITLE : APPARATUS FOR CONTROLLING
TENSION IN PROCESS LINE



ABSTRACT : PURPOSE: To fix the tension of a strip and to obtain a product excellent in the quality by compensating the responding characteristic of a rotating velocity controller for helper rolls according to the moment of inertia of the strip calculated from information and data.

CONSTITUTION: In a loop L for storing the strip 1 with the helper rolls 2, the position of a carriage 3 is controlled with a motor 5, velocity controller 6 thereof, compensator 8, etc., to obtain a prescribed tension. Further, the position of the carriage 3 is detected with a positional detector 7 and the moment of inertia of the strip stored in the loop L is calculated with a compensating computing element 16 based on this datum and the information of the strip 1, etc. The responding characteristic of velocity controller 13 of a motor 12 for driving the helper rolls 2 is compensated through the compensating computing element 16 according to the moment of inertia. By this constitution, even if the moment of inertia is changed, the velocity response of the helper rolls is kept constant and the variation of the tension of strip is restrained.

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